

A marked-up version of claim 11 is appended hereto.

REMARKS

Reconsideration and allowance of the subject application are respectfully requested.

Claim 11 is amended above to address the Examiner's concerns under §112, second paragraph. Support for this is found on page 1, lines 21-26, and page 2, line 26 to page 3, line 3. No new matter is introduced and entry is requested.

In the July 5, 2001 Office Action, claims 11-22 are rejected under 35 U.S.C.S §112, second paragraph, as allegedly indefinite. The Examiner has objected to some of the claims as including vague language. We have amended independent claim 11 above to specifically address the Examiner's concerns. Withdrawal of this rejection is believed to be in order.

Claims 11-22 are rejected under 35 U.S.C. §103(a) as obvious over the alleged "admissions" in the specification at pages 1-2 regarding the prior art (DE OS 3227126 and 3229097), in view of Moberg (WO 96/11572). The Examiner has asserted that it would have been obvious to use a diol, such as one taught by Moberg, in the combination anionic surfactant/carboxylic acid composition of the alleged admissions in our specification, to come up with our disinfectant agent for combating and inactivating phytopathogenic organisms that are present on plants.

It is correct that certain combinations of anionic tensides, aliphatic and aromatic carbonic acids as well as a few special heteroaromatic acids are described in the German references mentioned in our specification, which—according to those references—may destroy or inactivate animals, bacteria and fungus without gaps in activity. However, it should be noted that these are disinfectants designed for use in households and in the food sector (although the test germs employed were largely human pathogenic germs with smaller infection intensity).

It is also true that Moberg teaches mixtures that describe carbonic acids having up to 10 carbon atoms, or the corresponding salts, as well as terylenes that are useful as cleaning agents, disinfectants, surface treatments, impregnation preparations or for anti-microbiological treatment. Such agents are taught to be useful on human skin or surfaces such as wood.

None of these references describe a disinfecting agent for combating and inactivating phytopathogenic organisms that are present on plants or in a plant's surroundings, as required by independent claims 11 and 22 and all the dependent claims. Someone having ordinary skill in this art at the time of our invention would not have reasonably concluded that certain components described by DE OS 3227126 and DE 3229097 could be combined with certain other components described by Moberg—all of which are said to be useful against **human or zoological** pathogens—to achieve a disinfecting composition having a high degree of effectiveness against **phytopathogenic** organisms. The cell structure and metabolisms of plants and animals are completely different, and the ability of an agent to combat a human/animal germ (without injuring the human/animal) is no prediction that it will work effectively for plant germs (without injuring the plant). A preparation that may be used effectively on the skin of a baby and which produces no side effects, may cause severe damage and even destruction for a plant.

For instance, escherichia coli is known to cause disease in humans and other mammals; however, this bacterium does not cause disease in plants such as tulips or wheat. Conversely, it is also known that the tobacco mosaic virus attaches tobacco plants and other scrophulariaceens, but shows no pathogenesis toward humans or animals.

Moreover, if one tried to use a disinfecting composition to combat phytopathogenic germs—be it viral, bacterial or fungal—based on the components described by DE OS 3227126, DE 3229097 and Moberg, of course its effectiveness would need to be established *in vitro*. However, in the course of deployment of these preparations on living plants during the testing for any side-effects on plants, the test plants showed severe damage in the form of burns. Thus, such compositions would not be expected to be useful to combat phytopathogens.

Consequently, the inventors discovered with some surprise that during the use of certain combinations of acids and tensides in the presence of glycol, these problems of damaging plants were overcome. In fact, the plants cells (including roots, stalks, leaves, blooms and fruits) were completely undamaged during a concentrated application of our composition, and the composition exhibited pronounced microbiocide effectiveness.

We respectfully submit that no one familiar with phytopathogens would have reasonably concluded that the prior art products described as useful against microorganisms found on humans, animal, or non-living surfaces would also be useful against microorganisms living on plants. Of course, there is a demand for plant-digestible microbiocides, particularly in greenhouse cultures (which are often monocultures), since outbreaks of plant bacteria, fungi or viruses often result in severe loss for horticultural operations.

In summary, our claimed compositions having good plant digestibility was not obvious since the mixtures of anionic tensides, carbonic acids, carbon acids and terylenes, as taught by the three cited references, would actually cause damage to a plant to which it is applied. Reconsideration of this rejection is therefore requested.

In summary, all of the Examiner's outstanding rejections and objections have been addressed, and the application is believed to be in allowable form. Notice to that effect is earnestly solicited. No amendment made was related to the statutory requirements of patentability unless expressly stated herein, and no amendment made was for the purpose of narrowing the scope of any claim unless we argued above that such amendment was made to distinguish over a particular reference or combination of references.

US National application of  
PCT/EP99/07151

If the Examiner has any questions or would like to make suggestions as to claim language, she is encouraged to contact Marlana K. Titus at (301) 924-9600.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Marlana K. Titus".

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MARKED-UP VERSION OF THE AMENDED CLAIM 11

11. (Amended) A disinfecting agent for combating and inactivating phytopathogenic organisms that are present on plants and [in the immediate environment of] on surfaces surrounding plants, said agent comprising at least one anionic surfactant, at least one aliphatic carboxylic acid, at least one aromatic carboxylic acid, and mono-, di- and/or triglycols, in aqueous or aqueous-alcoholic solution.